

4. STATE & COUNTY DESCRIPTIONS

4.1 State Overview

Population

Arizona's population has increased rapidly since 1990 and is expected to continue growing rapidly. The State's population grew from approximately 6 million in 2005 to over 6.8 million in 2009, an increase of nearly 1 million or approximately 6%. Maricopa County is by far the largest population center in the State and is expected to remain so for the foreseeable future. The County grew from slightly over 3 million to slightly over 4 million, 1 million or 31% during 2000-2009. That is significantly slower growth than was experienced during 1990-2000 at 2.1 million to approximately 3.1 million, approximately 950,000 or 45%. In 2009, Maricopa County had approximately 60% of the State's population.

State/County	2005	2009
Arizona	6,044,985	6,812,137
Apache	73,775	76,668
Cochise	131,790	140,263
Coconino	130,530	136,735
Gila	54,445	57,204
Graham	34,455	39,792
Greenlee	8,300	8,688
La Paz	21,190	21,616
Maricopa	3,648,545	4,023,331
Mohave	188,035	206,763
Navajo	109,985	115,420
Pima	957,635	1,018,012
Pinal	246,660	356,303
Santa Cruz	44,055	47,900
Yavapai	205,105	228,494
Yuma	188,480	205,940

According to 2008 Census estimates, the 10 most populated and fastest growing Arizona cities are:

Most Populated				Fastest Growth			
City	DES Est Jul 1, 2008	Census Apr 1, 2000	% Change	City	DES Est Jul 1, 2008	Census Apr 1, 2000	% Change
Phoenix	1,561,485	1,321,045	18.2	Maricopa City	37,252	1,482	2413.6
Tucson	543,959	486,699	11.8	Sahuarita	23,190	3,242	615.3
Mesa	459,682	396,375	16.0	Buckeye	50,143	8,497	490.1
Glendale	248,435	218,812	13.5	Queen Creek	23,827	4,316	452.1
Chandler	244,376	176,581	38.4	El Mirage	33,647	7,609	342.2
Scottsdale	242,337	202,705	19.6	Surprise	108,761	30,848	252.6
Gilbert	214,820	109,697	95.8	Goodyear	59,436	18,911	214.3
Tempe	172,641	158,625	8.8	Marana	33,744	13,556	148.9
Peoria	155,560	108,364	43.6	Youngtown	6,522	3,010	116.7
Surprise	108,761	30,848	252.6	Avondale	76,648	35,883	113.6

Geography

Arizona is the sixth largest state in the United States, with 114,006 square miles¹. Major features of the state are shown on the following map titled *Major Features of Arizona*.

Arizona is typically considered a desert state, but is actually comprised of six major terrestrial ecoregions with widely varying geography². Each of the following six ecoregions cover varying land areas within the state:

- Arizona Mountain Forests ecoregion
- Chihuahuan Desert ecoregion
- Colorado Plateau Shrublands ecoregion
- Mojave Desert ecoregion
- Sierra Madre Occidental pine-oak forests ecoregion
- Sonoran Desert ecoregion

The Arizona Mountain Forests ecoregion contains a mountainous landscape, much of which is known as the Mogollon Rim, located in approximately the center of the state and running diagonally from southeast to northwest, including portions of Apache, Coconino, Graham, Gila, Greenlee, Maricopa, Mohave, Navajo, Pinal, and Yavapai Counties. This ecoregion includes numerous small to medium-sized cities and towns, such as Eagar, Flagstaff, Globe, Pinetop-Lakeside, Payson, Prescott, and Sedona. Elevations in this zone range from approximately 4,000 to 13,000 feet, resulting in comparatively cool summers and cold winters. Vegetation in this ecoregion is comprised largely of a mix of Scrub Grassland, Mogollon Chaparral Scrubland, Great Basin Conifer Woodland, Rocky Mountain Conifer Forest, and Plains Grassland.

The Chihuahuan Desert ecoregion occupies much of the southeastern portion of Arizona, including portions of Cochise, Gila, Graham, Greenlee, Pima, Pinal, and Santa Cruz Counties. Located within this ecoregion are the small to medium-sized desert communities of Bisbee, Douglas, Safford, and Sierra Vista. The elevation varies in this zone from approximately 3,000 to 4,500 feet. Due to its generally higher elevations the Chihuahuan Desert is cooler than its Sonoran Desert counterpart, with dry summers and occasional winter rains.

The Colorado Plateau Shrublands ecoregion covers much of the northern one-third of the state, including portions or all of Apache, Coconino, Mohave, Navajo, and Yavapai Counties. This ecoregion includes numerous small cities and towns, including Holbrook, Page, and Winslow. Elevations in this zone average around 4,000 to 5,000 feet. Vegetation in this ecoregion is comprised mainly of Plains Grassland and Great Basin Desert scrub, as shown in the following map titled *Terrestrial Ecoregions of Arizona*. Temperatures can vary widely in this zone, with comparatively warm summers and cool winters.

The Mojave Desert ecoregion covers a relatively small portion of northwest Arizona, including portions of Coconino and Mojave Counties. This ecoregion includes the communities of Kingman and Bullhead City, as well as a portion of the lower Grand Canyon. The elevation varies in this ecoregion from 1,500 feet to nearly 4,000 feet on some mountains. Typically the climate in this ecoregion is very hot and dry during the summer and comparatively warm during the winter.

The Sierra Madre Occidental pine-oak forest ecoregion is scattered throughout southeast Arizona, including small portions of Cochise, Graham, Greenlee, Pima, Pinal, and Santa Cruz Counties. Located within this ecoregion is the Town of Nogales, several portions of the Coronado National Forest, as well as the Chiricahua and Galiuro Wilderness areas. As a whole, this ecoregion is considered to have mild winters and wet summers, with variation within these regions due to the fluctuation in elevation associated with the forests.

The Sonoran Desert ecoregion is an arid environment that covers most of the southwestern one-third of the state, including portions or all of Gila, Graham, La Paz, Maricopa, Mojave, Pima, Pinal, Yavapai, and Yuma Counties. Located within this ecoregion are the major metropolitan areas of

¹ Economic and Business Research Program, 2003

² National Geographic, 2003

Phoenix and Tucson as well as numerous smaller towns and cities such as Florence, Parker, and Yuma. The elevation varies in this zone from approximately sea level to 3,000 feet. Vegetation in this zone is comprised mainly of Sonoran Desert Scrub, as shown in the following map titled *Terrestrial Ecoregions of Arizona*. Typically the climate in this zone is hot and dry during the summer and comparatively warm during the winter.

The primary component of the Arizona Mountain Forests is the Mogollon Rim, a mountainous area that is the major landform defining the northern from the southern portions of the state. The White Mountains in the central eastern part of the state are another large mountainous area. There are also a series of “mountain islands” in the southeastern corner of the state, including the Graham Mountains. Each of these mountainous areas is associated with relatively dense vegetation, ranging from high grasslands to Ponderosa Pine forests.

Arizona also contains a number of rivers, the largest of which is the Colorado, which runs year round and defines most of the western border of the state. The Colorado River has also created the Grand Canyon, which acts as a major barrier to movement in the northwestern portion of the state. Other large rivers, most of which are controlled via dams and run only occasionally, include the Aqua Fria, Gila, Salt, and the Verde Rivers.

Climate

Arizona’s geography results in an extreme climate in comparison with other states and also between locations within the state itself. The state’s extreme climate is a major contributor to a number of natural hazards in Arizona, including floods, drought and wildfires.

Average annual temperatures are in the mid-seventies in the Sonoran Desert ecoregion located in the lower half of the state, including cities such as Phoenix, Tucson, and Yuma. By contrast, annual average temperatures are much lower at higher elevations in the Arizona Mountain Forests, Chihuahuan Desert, and Sierra Madre Occidental pine-oak forests ecoregions. Average annual temperatures for communities that exist in the Colorado Plateau Shrublands ecoregion fall between these two extremes.

Summer temperatures may exceed 120° in the Sonoran Desert ecoregion. Even relatively high elevations in the Arizona Mountain Forests ecoregion may reach high temperatures, such as in Flagstaff, which has been known to approach 100° during the summer. Remarkably, these same locations can reach well below freezing (32°) in winter. For example, Flagstaff has dropped to –23°, while even Phoenix winter temperatures have been known to fall into the teens.

These temperature extremes are at least partly the result of Arizona’s relatively dry climate. This arid environment is itself a function of a number of factors, including Arizona’s separation from nearby major water bodies (i.e., Pacific Ocean, Gulf of California, and Gulf of Mexico), intervening mountainous regions (i.e., Sierra Nevada Mountains), and relatively low elevations across two-thirds of the state.

Average Temperatures In Arizona (Degrees Fahrenheit)												
City	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Flagstaff	29.7	32.2	36.6	42.9	50.8	60.1	66.1	64.4	57.8	47.1	36.5	30.2
Parker	54.1	58.7	63.8	70.7	79	87.7	93.2	92.3	86.2	74.6	61.6	53.9
Phoenix	54.2	58.2	62.7	70.2	79.1	88.6	92.8	91.4	86	74.6	61.6	54.3
St Johns	34.1	39.1	45.2	51.8	60.5	69.6	73.8	71.7	65.6	54.5	42.3	34
Tucson	54	57.4	61.7	68.4	76.9	86.1	88.5	87	83.07	72.6	60.9	54.2

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Average Monthly Precipitation in Arizona (Inches)												
City	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Flagstaff	2.18	2.56	2.62	1.29	.8	.43	2.4	2.89	2.12	1.93	1.86	1.83
Parker	.87	.70	.65	.17	.09	.02	.27	.61	.57	.32	.33	.57
Phoenix	.83	.77	1.07	.25	.16	.09	.99	.94	.75	.79	.73	.92
St Johns	.75	.56	.76	.45	.46	.49	1.72	2.33	1.42	1.17	.66	.70
Tucson	1.04	.96	.88	.33	.20	.28	1.93	2.23	1.24	1.21	.68	1.02

Economy

The major employment sectors in Arizona include aerospace, electronics and semi-conductor manufacturing. Tourism, business services and back-office operations are also important sectors. Arizona's original export activities, agriculture and mining remain significant in many rural parts of the State. Based on sheer size, the real estate and rental industries, the diverse tourism sector, and government are the largest economic sectors in Arizona. Relative to the national average, the construction sector is also unusually large because of the State's rapid growth.

Arizona Key Employment Sectors, 2009 Q3			
Industry	Employment	% change Q3 2008-2009	Wages
Health Care & Social	295,881	1.5	\$47,202
Retail	194,315	-7.5	\$28,088
Accommodation & Food	218,234	-5.2	\$17,528
Administrative & Waste	194,931	-14.3	\$31,442
Educational Services	189,088	-.07	\$38,914
Source: AZ Dept of Commerce Research Administration, June 2010			

Between 2008-2010, the unemployment rates increased significantly due to the recession felt across the nation. Arizona's unemployment rate increased from 9.2% in May 2009 to 9.6 in May 2010¹. Arizona is still lagging behind other parts of the country, but conditions are starting to look better in 2010. Consumer spending is increasing as evidenced by retail sales figures. Nonfarm employment has stopped falling as hiring resumes, at least in some sectors. Homebuilding activity has moved up off the bottom, and home prices are no longer declining. Not all components of the economy have turned the corner and entered recovery mode, but the list is growing.

County Unemployment Rates (Figures shown in percentages)							
County	2008	2010 Est	Increase	County	2008	2010	Increase
Graham	4.2	13.1	8.9	Yavapai	5	9.5	4.5
Yuma	15.9	24.4	8.5	Maricopa	4.4	8.2	3.8
Greenlee	4.5	12	7.5	Mohave	6.5	10.2	3.7
Navajo	8.6	15.1	6.5	Coconino	4.8	8.3	3.5
Santa Cruz	9.3	14.7	5.4	Pima	4.9	8.2	3.3
Apache	10.1	15.1	5	Cochise	5.1	7.6	2.5
Gila	5.7	10.7	5	La Paz	6.8	8.5	1.7
Pinal	6.6	11.1	4.5				
Source: All figures from AZ Dept of Commerce; 2008 from county profiles and 2010 from "Special Unemployment Report", June 2010.							

¹ AZ Dept of Commerce, June 2010.

Agriculture

In 2005 there were approximately 10,000 farms and ranches in Arizona. Farms with annual sales of more the \$10,000 were approximately 30% of that total; many of the rest were sidelines for operators who held other jobs. Agriculture land covered over 26 million acres. Only 5% of farmland was devoted to crops; by far the largest share of the land was used for livestock. Irrigation was used on 68% of all cropland.

Manufacturing

Manufacturing is a relative newcomer to the economy of Arizona, but since 1950 it has become one of the State's major sources of income, rivaling the five C's – cattle, copper, cotton, citrus and climate – on which the State's economy previously depended. Because of military needs and the shift of the nation's defense from coastal to inland areas during World War II, many new manufacturing plants, especially aluminum, were established. The greatest industrial growth is in the electronics and aviation fields, centered chiefly in the Phoenix and Tucson areas. In the late 1990's, the leading manufacturers were firms engaged in the production of electronics and electric equipment, particularly semiconductors, radios and televisions and printed circuit boards, manufacturers of transportation equipment, primarily aircraft and aircraft parts, guided missiles and vehicles used in space and the makers of instruments and related equipment. Other leading manufacturers included food processors, firms making metal products and printers and publishers.

Mining¹

Copper mining has been contributing to Arizona's economy since the arrival of Europeans in the 16th Century. The production of copper and byproduct metals, especially molybdenum, silver and gold remains an important part of that economy even today. The total impact of the copper industry on Arizona's economy rose in 2006 as its direct impact increased. That total impact included combined direct and indirect contributions of:

- \$4.719 billion direct and indirect impact on Arizona's economy
- \$1.404 billion in personal income for Arizona's residents
- \$2.990 billion in sales revenue for other Arizona businesses
- \$325 million in revenue for Arizona state and local governments (Direct payments exceeded \$141 million. The biggest share was paid to Arizona's public schools - \$45 million) Arizona copper producers

Arizona copper producers in 2006 had mining and processing operations at various locations in Cochise, Gila, Greenlee, Mohave, Pima, Pinal and Yavapai counties that also produced substantial amounts of molybdenum, gold, silver and other metals as byproducts in the production of copper. Arizona copper producers exported about 8% of the metals they produced to other countries, particularly in the Far East. Those exports brought in \$437 million.

Arizona's three large copper producing firms (ASARCO, BHP and Freeport-McMoRan) and several smaller firms mined in 2006:

- 787,236 tons of copper and other minerals with of total value of
- \$5.628 billion (59% more than in 2005)
- 60% of the copper mined in the United States in 2006

Tourism

The multi-billion dollar travel industry in Arizona is an important part of the state and local economies. The industry is represented primarily by businesses in the leisure and hospitality sector, transportation and retail. The money that visitors spend on various goods and services while in Arizona produces business receipts at these firms, which in turn generate earnings and employment for Arizona residents. In addition, state and local governments collect taxes that are generated from visitor spending. Most of these taxes are imposed on the sale of goods and services to visitors, thus avoiding a tax burden on local residents.

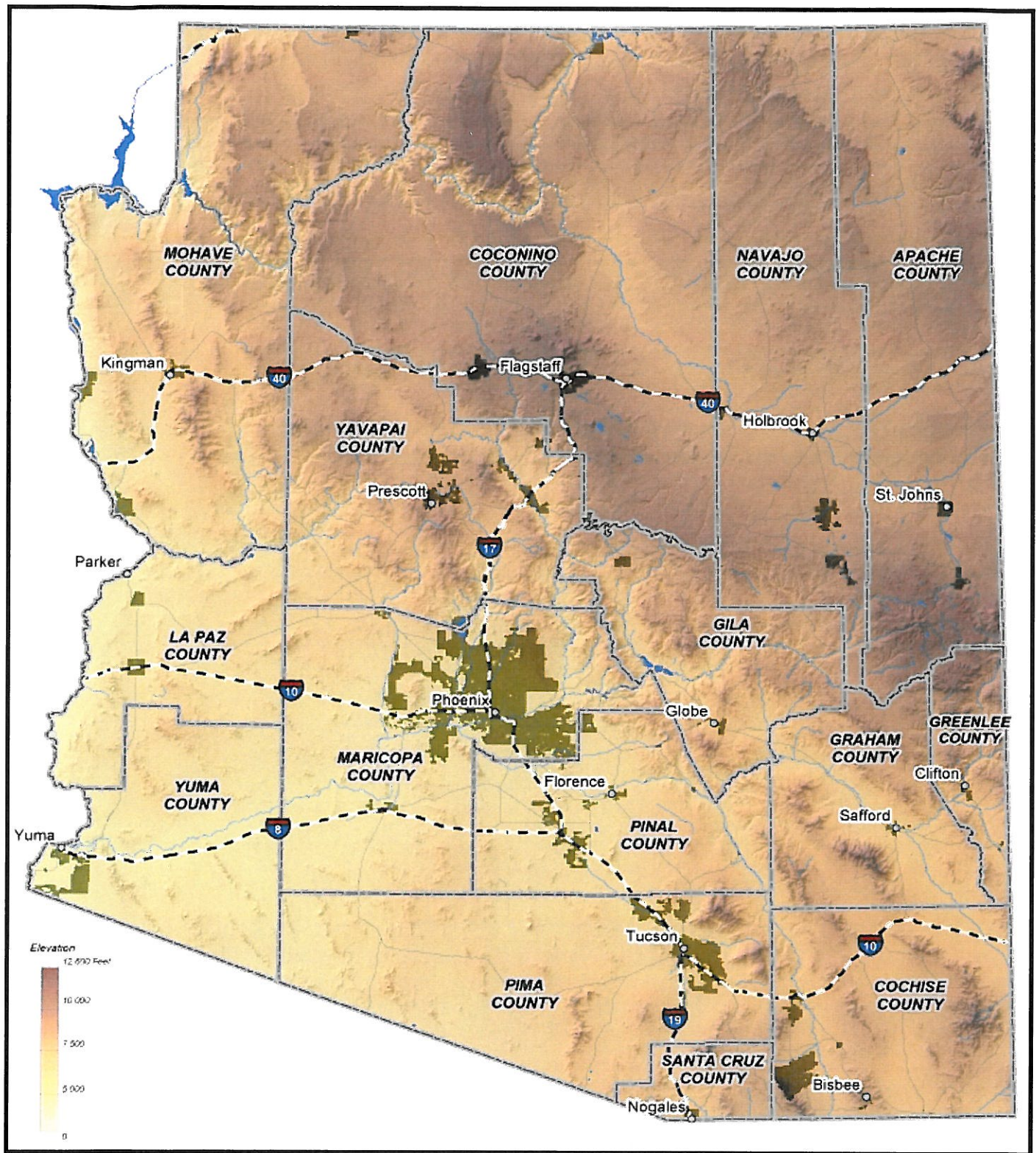
¹ "Copper: An Economic Profile – Economic Engine for Arizona" AZ Mining Association, June 2010.

Total direct travel spending in AZ in 2008 was \$18.5 billion. This represents a 3.2% decrease over the preceding year in current dollars. Employment, earnings and tax receipts also declined. Nationally, there has also been a sharp decline in travel due to the recession. Travel activity to AZ began to weaken earlier (4th quarter of 2007) than in the larger U.S. The collapse of the housing market and the economic recession in Arizona and Southern California were contributing factors.

Direct travel spending in Arizona generated 166,900 jobs with earnings \$50 billion in 2008. Three-fourths of these jobs were in the accommodations, food service and arts, entertainment and recreation industries. Additionally, \$1.4 billion in state and local tax revenues were earned.

Arizona Travel Trends 2005-2008						
	Spending	Earnings	Employment	Tax Revenue (\$ Million)		
	(\$ Billion)		(Thousand)	Local/State	Federal	Total
2005	17.6	4.5	168.8	1,399	1,081	2,479
2006	18.7	4.9	172.0	1,464	1,176	2,640
2007	19.1	5.0	170.0	1,501	1,213	2,713
2008	18.5	5.0	166.9	1,437	1,159	2,596
Annual % Change						
07-	-3.2	-1.6	-1.8	-4.3	-4.4	-4.3
Source: "Arizona Travel Impacts" Prepared for the AZ Office of Tourism, June 2009						

Top Arizona Attractions by Visitation - 2008			
Natural Attractions		Private Attractions	
Grand Canyon Nat'l Park	4,491,000	London Bridge	3,650,000
Saguaro Nat'l Park	2,738,772	Tempe Town Lake	2,784,000
Glen Canyon Nat'l Recreation	1,900,000	Chase Field	2,639,915
South Mountain Park	1,445,547	US Airways Center	1,373,607
Lake Mead Nat'l Recreation	1,344,850	Jobing.com Arena	1,200,000
Source: "Arizona 2008 Tourism Facts, Year-end Summary", Arizona Office of Tourism			



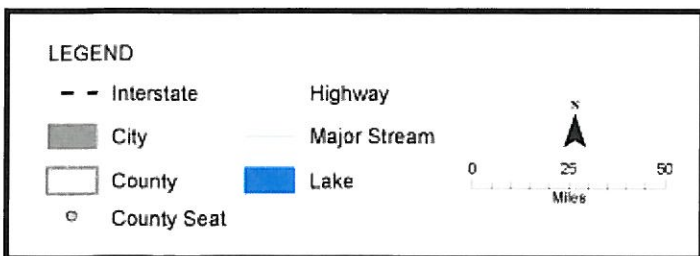
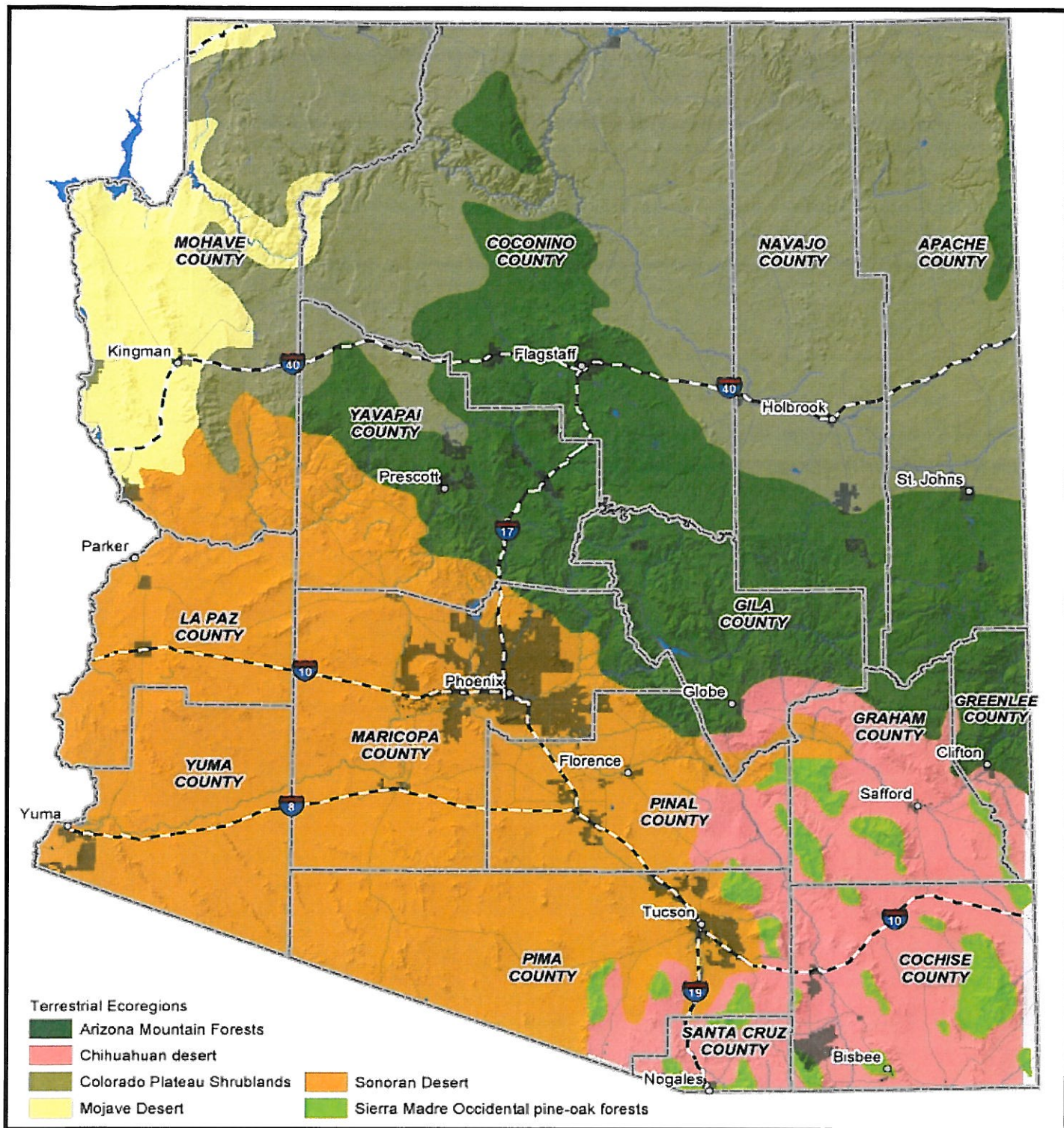
LEGEND


- - Interstate
- City
- County
- County Seat
- Highway
- Major Stream
- Lake



State of Arizona
Multi-Hazard Mitigation Plan

Map 1 Major Features of Arizona





State of Arizona
Multi-Hazard Mitigation Plan

Map 2
Terrestrial
Ecoregions of Arizona